Case: Docket 2018-319-E

Intervener: Hasala Dharmawardena

Date Submitted: 3/19/2019

Summary

This surebuttal testimony addresses the rebuttals by DEC witnesses Hager and Piro.

Reply to Hager Rebuttal

- Page 3 , Line 6-12 : DEC agrees that "customer-related costs are in incurred as a result of the number of customers being served" and that "customer costs are related to the number of customers ". As proved in my pre-filed testimony, for a given feeder the minimum cost system does not depend on the number of customers being served. For a given feeder, the cost will be the same irrespective of the number of customers that are served in a majority of cases. Since this cost is not related to the number of customers served, and based on the definition of a customer related cost by DEC, the minimum system concept cannot be used as the unequivocal method to ensure 0 cross subsidization as put forward by DEC in my opinion.
- Page 4 line 7 to 12 : The issue that DEC is trying to address is the 'assumed' cross subsidization between customers in the same customer class. It is not possible to make a simple tariff to ensure zero cross subsidization in customers between a customer class. Assume we use the MSC as a perfect method, then if applied 'fairly' the MCS based BFC for the customer living next to the substation will be ~0$, whereas the MSC BFC cost for the customer at the very end of the feeder will be very large. Even assuming the MSC is perfect, there is bound to be large 'assumed' cross subsidization. This points out to the fact that trying this kind of micro-level cost allocation is not a recommended strategy for a public utility. The reality is that by having a public utility supply the society, the costs for all connected reduce but the costs borne by each customer can never be the value of the cost borne by the utility to supply that customer. This means that the service cannot be perfectly allocated based on cost causation. There is always some level of cross subsidization that cannot be addressed in any manner.
- Page 5 Line 18-20 : This statement is incorrect. A low BFC will make the kWh cost increase. Since the rate for variable charge will be higher than what it would be if MSC is used, the customer will have to pay more if they use more energy. This will send a cost signal to the customer to consume less, not more!
- Page 6 – Line1-2: The statement is incorrect assuming that the MSC is referred to in 'rates reflect cost causation' (page 5-line 20). If this method is used there will less inclination to be energy efficient or invest in solar. This is because the energy cost will be lower and the fixed cost is higher to the user if MSC is used. Less incentive to save energy or invest in solar power.
- Page 5 line- 15-23 : This is a fair example if the system was built just to serve this customer. However, it is a common roadway, a utility service. In any case, for both holiday homes and net metering homes, the number of users in SC are insignificant to have any realistic impact of thon the costs.

On the other hand, one could argue that even within the existing tariff structure the net metered homes are saving money to the utility by energy not served, which means the loss from one way power flow is accounted as a profit for the utility (as well as cost saved by cu loss based degradation in the infrastructure). How about avoided CO2, SOx, NOx or radiation risks? Will these be considered as savings to the utility and thereby to the other non-participating customers? With the same argument one could argue that the net metering customers are subsidizing these cost components for the other customers. Additionally, what of the avoided cost of expansions of generation and transmission? This only shows us to the futility on trying to find solutions to the future power grid using existing systems.

- Page 10 line 1-13: I did not ask not to allocate the costs. The request was to keep the current system in place. Currently the costs that DEC identifies as customer related is captured via the variable charge. This helps to send a salient cost signal to the customers to save energy and thereby helps to minimize the required investments to expand generation and transmission resources. Has DEC considered the impact of the proposed tariff structure on demand? It is recommended that they look at price sensitivity and demand growth based on new tariff, and see how much extra investment that the new tariff will enforce on the utility in the long term.

Reply to Pirro Rebuttal

- Page 5 Line 18-23: Witness Pirro talks about 'Prudent' investment. From which follows that customers should be less inclined to save energy or install self-generation. On the other hand, Duke has DSM and EE programs. The intention of these programs is to minimize the need for Grid expansion by DSM. Does this mean DEC believes in encouraging efficiency to minimize the need for Grid expansion? In this case, it means that the cost saved is worth the investment for EE programs. This contradicts the argument that the cost reflective price signal should define the demand. These points to the fact that DEC understands the value of EE, while contradictorily proposing a tariff structure that has a negative impact on EE. It is important to have a consistent utility policy.
  "encourage distribution generation for their own sake" – The question is, what makes "distributed generation" different from the EE programs that DEC provides to the customers? These are similar in nature, whereas one saves passively, the other saves actively. These technologies should be supported 'not for their own sake', but for the value they generate to the utility looking from a holistic viewpoint.

Summary on MSC issue

This proposal will negatively affect energy efficiency investments and solar PV adoption by consumers. It could be argued that this is institutionalizing and rationalizing the utility costs so that the model stays the same. The dis-incentivisation of efficiency and self-generation will force additional centralized capacity growth, which will then burden all utility customers. This again leads to utility having to reinvest in feeder enhancing which again drives up the cost - creating a vicious cycle.

This firmly establishes and ring-fences a particular business model for the utility through guaranteed revenue for the business. This will curtail market innovation (smart grids with distributed generation) by

dis-incentivizing customers to generate power (solar) but also for utility to manage Microgrids because the centralized generation and transmission business model will be firmly secured through this tariff change. While the commission assuring the financial stability is not faulted, the method must be put under the microscope for its longer-term consequences.

At the end of the day it is my view that all these inconsistencies crop up because we are trying to apply an outdated business model to analyze the 'future' power system. This approach could have a negative impact to all stakeholders. It is time for all of us to learn from our past mistakes and look forward to making a better future.

References

[1]

Duke Energy Carolinas' Response to

Hasala Dharmawardena's First Set of Written Discovery Requests

Pursuant to S.C. Code Ann. § 58-4-55

Docket No. 2018-319-E

Related to DEC Application

Date of Request: February 25, 2019

Date of Response: March 4, 2019